

Application No. 10/058,141

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-17. (Cancelled)

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18. (Currently Amended) An apparatus for watching around a vehicle, comprising:

an imaging device including;

a casing disposed on an outer side of said vehicle and having a pair of right and left transmission window portions in either side of said casing;

a prism contained in said casing in the form of an isosceles triangle in section with a vertical angle directed to a front part of said casing, the right and left sides of said prism which correspond to the equal sides of the isosceles triangle being directed to the respective right and left transmission window portions; and

an imaging element disposed to the rear of said prism and used for converting a ray of light from the left and right sides of said prism into respective left and right image signals by concentrating light on an imaging plane via an imaging lens, the ray of light being incident on one of the right and left sides of said prism, reflected from the other side of said prism and emitted from the rear side of said prism to said left and right image signals; and

an internal reflection preventive means for preventing stray light from undergoing total reflection in said prism and preventing stray light entering from the left and right sides of said prism from entering into the opposing left and right image signals, and ~~wherein the internal reflection preventive means relates with said prism according to the following equation:~~ and the internal reflection preventive means covers at least a portion of the rear side of said prism to form a light transmission window.

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~~\_\_\_\_\_  $n_1$  = refractive index of the internal reflection preventive means~~  
~~\_\_\_\_\_  $n_2$  = refractive index of prism~~  
~~\_\_\_\_\_  $\theta_1$  = incident angle of stray light~~  
~~\_\_\_\_\_  $n_1 > \sin \theta_1 \times n_2$ , so that the internal reflection preventive means deflects light at an incident angle greater than a predetermined value.~~

3' 19. (Currently Amended) The apparatus for watching around a vehicle in ~~claim 18,~~ claim 34, wherein the refractive index of said preventive means prevents total reflection of stray light having an incident angle at least 50°.

20. (Currently Amended) The apparatus for watching around a vehicle in ~~claim 19,~~ claim 34, wherein the refractive index of said preventive means prevents total reflection of stray light having an incident angle of approximately 65°.

21. (Previously Presented) The apparatus for watching around a vehicle in claim 20, wherein said internal reflection preventive means is an internal reflection preventive film and said film is formed of black paint of index  $n_1$  which absorbs the stray light.

22. (Previously Presented) The apparatus for watching around a vehicle in claim 18, wherein

said internal reflection preventive means is an adhesive member for sticking to the rear side of said prism;

a predetermined holder for supporting said prism; and

a buffer member for buffering said prism from vibration from said holder.

23. (Previously Presented) The apparatus for watching around a vehicle in claim 22, wherein said adhesive member is colored black so as to absorb the stray light.

24. (Previously Presented) The apparatus for watching around a vehicle in claim 18, wherein said internal reflection preventive means includes a light scattering plane

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formed outside an effective area with respect to said imaging element disposed to the rear of said prism.

25. (Previously Presented) The apparatus for watching around a vehicle in claim 24, wherein black paint for absorbing stray light is applied to the light scattering plane.

26. (Previously Presented) The apparatus for watching around a vehicle in claim 18, wherein light absorbing means for absorbing light resulting from the partial reflection of the stray light from the side of said prism is formed in part of the side of said prism.

27. (Previously Presented) The apparatus for watching around a vehicle as claimed in claim 26, wherein said light absorbing means is black paint.

28. (Previously Presented) An apparatus for watching around a vehicle, comprising:

an imaging device including;

a casing disposed on the outer side of the vehicle and having a pair of right and left transmission window portions in either side of the casing; and

a prism contained in said casing in the form of an isosceles triangle in section with its vertical angle directed to the front part of the casing, the prism having a left, right and rear side, the right and left sides of the prism which correspond to the equal sides of the isosceles triangle being directed to the respective right and left transmission window portions; and

an imaging element disposed to the rear of said prism and used for converting a ray of light from the left and right sides of said prism into respective left and right image signals by concentrating light on an imaging plane via an imaging lens, the ray of light being incident on one of the right and left sides of said prism, reflected from the other

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side of said prism and emitted from the rear side of said prism to said left and right image signals; and

light absorbing means for absorbing light resulting from the partial reflection of the stray light from the left and right side of said prism being formed in part of the side of said prism and preventing the stray light from appearing on the opposing left and right image signals, the light absorbing means including a predetermined holder for supporting said prism and a buffer member to buffer said prism against vibration from said predetermined holder.

B' 29. (Previously Presented) The apparatus for watching around a vehicle as claimed in claim 28, wherein said light absorbing means is black paint.

30. (~~Previously Presented~~Currently Amended) An apparatus for watching around a vehicle, comprising:

an imaging device including;

a casing disposed on the outer side of said vehicle and having a pair of right and left transmission window portions in either side of said casing;

a prism contained in said casing in the form of an isosceles triangle in section with a vertical angle directed to the front part of said casing, the right and left sides of said prism which correspond to the equal sides of the isosceles triangle being directed to the respective right and left transmission window portions;

an imaging element disposed to the rear of said prism and used for converting a ray of light from the left and right sides of said prism into respective left and right image signals by concentrating light on an imaging plane via an imaging lens, the ray of light being incident on one of the right and left sides of said prism, reflected from the other side of said prism and emitted from the rear side of said prism to said left and right image signals; and

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internal reflection preventive means for preventing stray light having an incident angle of at least  $50^\circ$  ~~with respect to a rear surface of the prism~~ and preventing total reflection according to the following equation:

$n_1$  = refractive index of the internal reflection preventive means

$n_2$  = refractive index of prism

$\theta_1$  = incident angle of stray light

$n_1 > \sin \theta_1 \times n_2$ , so that stray light from one of the left and right window portions greater than  $50^\circ$  incidence is prevented from total reflectance through the prism and entry into the opposite image signal.

31. (Previously Presented) The apparatus for watching around a vehicle as claimed in claim 30, wherein corner portions formed with the sides of said prism and the rear side of said prism are cut in a range to exclude a range of horizontal viewing angles of said prism and to prevent stray light from the left and right sides of said prism from appearing on the opposing left and right image signals.

32. (Previously Presented) The apparatus for watching around a vehicle as claimed in claim 30, wherein a light scattering plane is formed on each of the surfaces formed by cutting the corner portions.

33. (Previously Presented) The apparatus for watching around a vehicle as claimed in claim 32, wherein black paint for absorbing stray light is applied to the light scattering plane.

34. (New) The apparatus for watching around a vehicle according to claim 18, wherein the internal reflection preventive means relates with said prism according to the following equation:

$n_1$  = refractive index of the internal reflection preventive means

$n_2$  = refractive index of prism

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$\theta_1$  = incident angle of stray light

$n_1 > \sin \theta_1 \times n_2$ , so that the internal reflection preventive means deflects light  
at an incident angle greater than a predetermined value.